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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,279	01/24/2002	Yoshiharu Sasaki	Q68236	6321

7590 04/18/2006

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Washington, DC 20037-3213

EXAMINER

NGUYEN, ANTHONY H

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

31

<b>Office Action Summary</b>	<b>Application No.</b> 10/054,279	<b>Applicant(s)</b> SASAKI, YOSHIHARU	
	<b>Examiner</b> Anthony H. Nguyen	<b>Art Unit</b> 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 and 53 is/are pending in the application.  
     4a) Of the above claim(s) 8-23 is/are withdrawn from consideration.  
 5) ☒ Claim(s) 43-51 is/are allowed.  
 6) ☒ Claim(s) 1-7, 24-42 and 53 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 06, 2006 has been entered.

### ***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 53 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Williams et al. (US 6,024,019) in view of Corrado et al. (US 6,196,128) and Naniwa et al. (US 6,474,236).

With respect to claims 1, 4 and 53, Williams et al. teaches a recording apparatus having a recording head 320, a flexible plate 306 or 122, a recording medium fixing member 500 which includes a plurality of suction ports 506 which secure the flexible plate 306,122 and a cylinder cleaner 325 (Williams et al., Figs. 2, 8,11 and 12). Williams et al. does not teach clearly the adhering roller which cleans the fixed surface of the recording medium fixing member and the

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flexible plate having a plurality of distributed holes. Corrado et al. teaches the adhering cleaning roller 40 which moves to or away from the surface of the roller 18 for cleaning as shown in Fig.1. Naniwa et al. teaches the conventional use of a flexible plate 13 having a plurality of distributed holes 14(b) as shown in Figs.2 of Naniwa et al. In view of the teachings of Corrado et al. and Naniwa et al., it would have been obvious to one of ordinary skill in the art to modify the recording apparatus of Williams et al. by substituting the adhering roller as taught by Corrado et al. to improve the efficiency of cleaning the fixed surface of a recording medium fixing member in place of the cylinder cleaner 325 of Williams et al. and providing the flexible plate which includes a plurality of holes as taught by Naniwa et al. to improve the efficiency of securing the flexible on the recording medium fixing member. With respect to claims 2 and 3, the selection of a desired size or adhesive strength or adhesive material used for the roller or the hardness of the adhering roller for would be obvious through routine experimentation in order to get best possible cleaning the surface of the recording member. With respect to claims 5-7, the combination of Williams et al. and Corrado et al. teaches the steps of attaching the flexible plate on to the flexible plate onto the fixed surface of a roller or a cylinder and leaning the flexible plate using an adhering roller or the steps of removing foreign material using an adhesive roller which is moved toward or away from a printing roller or a cylinder as recited in the claims.

Claims 24-42 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Williams et al. (US 6,024,019) in view of Corrado et al. (US 6,196,128) and Shinoda. (US 2001/0017996).

With respect to claims 24, 35 and 42, Williams et al. and Corrado et al. teach the recording apparatus and foreign material removal method having substantially the structure and method as recited. See the explanation of Williams et al. and Corrado et al. above. Williams et al. does not teach the adhesive roll having a crown shape. Shinoda teaches the conventional use of a squeezing or cleaning roller 17 which is formed into a crown shape for removing a solvent in a liquid toner on a photoconductor belt 15 as shown in Fig.5 of Shinoda. In view of the teachings of Corrado et al. and Shinoda., it would have been obvious to one of ordinary skill in the art to modify the recording apparatus of Williams et al. by substituting the adhering roller as taught by Corrado et al. and providing the cleaning roller having a crown shape as taught by Shinoda to improve the efficiency of cleaning the fixed surface of a recording medium fixing member in place of the cylinder cleaner 325 of Williams et al. With respect to claims 25-27, 31-33 and 36-41, the selection of a desired size or adhesive strength or adhesive material used for the roller or the hardness of the adhering roller for would be obvious through routine experimentation in order to get best possible cleaning the surface of the recording member.

***Allowable Subject Matter***

Claims 43-51 are allowable.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach the steps of first removing foreign material on a recording medium surface comprising bringing a cleaning roller having an adhesive property in

contact at about a middle portion of the length of the recording medium, relatively moving the cleaning roller in contact with the recording medium, in a first main scanning direction toward an end of the recording medium, second removing foreign material on the recording medium surface comprising bringing the cleaning roller in contact at about a middle portion of the length of the recording medium, relatively moving the cleaning roller in contact with the recording medium, in a second main scanning direction opposite to the first main scanning direction toward another end of the recording medium (claim 43).

The prior art of record does not teach the steps of first removing foreign material on a recording medium surface comprising bringing a cleaning roller having an adhesive property in contact at about a middle portion of the length of the recording medium, relatively moving the cleaning roller in contact with the recording medium, in a first main scanning direction toward an end of the recording medium, separating the cleaning roller from the recording medium fixing member surface, second removing foreign material on the recording medium surface comprising bringing the cleaning roller in contact at about a middle portion of the length of the recording medium, relatively moving the cleaning roller in contact with the recording medium, in a second main scanning direction opposite (or reverse direction) to the first main scanning direction toward another end of the recording medium and separating the cleaning roller from the recording member surface (claims 44 and 45).

### ***Conclusion***

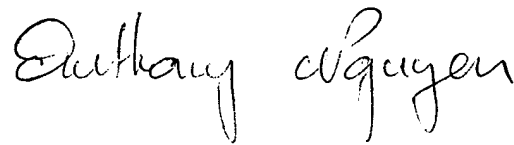
The patents to Rasmussen et al., Kurotaka et al. and Takeda et al. are cited to show other structures and methods having obvious similarities to the claimed structure and method.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169.

The examiner can normally be reached daily from 9 AM to 5PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168.

The fax phone number for this Group is (571) 273-8300.

A handwritten signature in cursive script that reads "Anthony Nguyen".

Anthony Nguyen  
04/14/06  
Patent Examiner  
Technology Center 2800